### **Comparisons of Job Characteristics**

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011)

Associated Occupation: Microbiologists (19-1022)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

88

#### Knowledge

Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011)

Associated Occupation: Microbiologists (19-1022)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Biology	3.7	24.1	16.7	<<	Extensive education and/or training may be required
English Language	11.2	16.6	10.3	<<	Extensive education and/or training may be required
Chemistry	4.8	15.2	11.9	<<	Extensive education and/or training may be required
Medicine and Dentistry	3.7	10.7	10.1	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Skills**

Similarity of Focus Occupation to Associated Occupation:

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011)

Associated Occupation: Microbiologists (19-1022)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation		
Science	4.5	17.0	10.9	<<	Extensive development of skills in this area may be required	
Reading Comprehension	10.7	15.5	12.9	<	A higher skill level may be required	
Critical Thinking	10.8	15.0	11.7	<<	Extensive development of skills in this area may be required	
Writing	9.2	14.8	10.2	<<	Extensive development of skills in this area may be required	
Active Learning	8.7	14.7	9.7	<<	Extensive development of skills in this area may be required	
Learning Strategies	7.2	12.2	8.2	<<	Extensive development of skills in this area may be required	

Mathematics	6.2	11.0	8.0	<<	Extensive development of skills in this area may be required
Management of Personnel Resources	6.9	10.6	7.6	<<	Extensive development of skills in this area may be required
Systems Analysis	6.5	10.6	6.8	<<	Extensive development of skills in this area may be required
Systems Evaluation	6.4	9.9	6.0	<<	Extensive development of skills in this area may be required
Operations Analysis	5.0	8.8	2.3	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Abilities**

#### Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011)

Associated Occupation: Microbiologists (19-1022)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation		
Inductive Reasoning	10.2	18.0	12.4	<<	Extensive improvement in abilities may be required	
Written Comprehension	11.0	16.5	12.7	<<	Extensive improvement in abilities may be required	
Problem Sensitivity	11.1	16.1	13.0	<	Some improvement in abilities may be required	
Category Flexibility	9.0	16.0	11.2	<<	Extensive improvement in abilities may be required	
Deductive Reasoning	10.6	15.7	12.2	<<	Extensive improvement in abilities may be required	
Written Expression	9.8	15.5	10.7	<<	Extensive improvement in abilities may be required	
Near Vision	11.1	15.0	14.0	0	Current ability level may be sufficient	
Information Ordering	9.9	13.9	11.4	<	Some improvement in abilities may be required	
Flexibility of Closure	7.8	13.6	11.7	<	Some improvement in abilities may be required	
Fluency of Ideas	7.6	12.8	7.2	Extensive improvement in abilities may be required		

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of  $O^*NET$  (Occupation Information Network) data.

## **Activities that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 91

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011) Associated Occupation: Microbiologists (19-1022)

Work Activities Exclusivity of Activity

Analyze biological research, test, or analysis data   76   Analyze scientific research data or investigative findings   27   Conflict statistical data   30   Collect statistical data   47   Communicate technical information   47   Communicate technical information   47   Conflict statistical data   48   Conflict statistical da	Adhere to safety procedures	12
Collect scientific or technical data   30	Analyze biological research, test, or analysis data	70
Collect statistical data	Analyze scientific research data or investigative findings	27
Communicate technical information	Collect scientific or technical data	30
Conduct analyses or tests of organic compounds	Collect statistical data	47
Conduct laboratory research or experiments       57         Conduct standardized qualitative laboratory analyses       62         Conduct standardized qualitative laboratory analyses       62         Cuttivate micro-organisms for study, testing, or medical preparations       84         Develop policies, procedures, methods, or standards       21         Direct and coordinate activities of workers or staff       3         Direct implementation of new procedures, policies, or programs       60         Examine biological or other material specimens under microscope       73         Explain complex mathematical information       30         Follow infectious materials procedures       52         Follow infectious materials procedures       52         Isolate and identify micro-organisms       82         Maintain records, reports, or files       5         Ferform statistical analysis       71         Prepare biological specimens for examination       84         Prepare reports       8         Prepare vaccines, biologicals, or serums       8         Record test results, test procedures, or inspection data       48         Research human or animal disease       77         Use biological research techniques       68         Use chemical testing or analysis procedures       54	Communicate technical information	4
Conduct standardized qualitative laboratory analyses 62 Conduct standardized quantitative laboratory analyses 62 Cultivate micro-organisms for study, testing, or medical preparations 84 Develop policies, procedures, methods, or standards 21 Direct and coordinate activities of workers or staff 33 Direct implementation of new procedures, policies, or programs 60 Examine biological or other material specimens under microscope 73 Explain complex mathematical information 30 Foliow infectious materials procedures 52 Foliow microbiology procedures 74 Foliow safe waste disposal procedures 75 Foliow safe waste disposal procedures 75 Isolate and identify micro-organisms 82 Maintain records, reports, or files 75 Perform statistical analysis 77 Prepare biological specimens for examination 84 Prepare vaccines, biologicals, or serums 85 Record test results, test procedures, or inspection data 88 Research human or animal disease 77 Use biological research techniques 68 Use computers to enter, access or retrieve data 33 Use hazardous materials information 35 Use health or sanitation standards 62 Use knowledge of investigation techniques 96 Use laboratory equipment 97 Use biological research techniques 97 Use beath or sanitation standards 97 Use laboratory equipment 97 Use laboratory equipment 97 Use laboratory equipment 97 Use laboratory equipment 97 Use quantitative research techniques 97 Use mathematical information 97 Use guantitative research methods 97 Use scientific research methods 97 Use scientific research methodology 97 Use use relational database software 97 Use scientific research methodology 97 Use techniques 97 Use techniques 97 Use techniques 97 Use techniques 97 Use tech	Conduct analyses or tests of organic compounds	71
Conduct standardized quantitative laboratory analyses  Cultivate micro-organisms for study, testing, or medical preparations  844 Develop policies, procedures, methods, or standards  Direct and coordinate activities of workers or staff  Direct and coordinate activities of workers or staff  Direct implementation of new procedures, policies, or programs  600 Examine biological or other material specimens under microscope  73 Explain complex mathematical information  300 Follow infectious materials procedures  52 Follow microbiology procedures  74 Follow safe waste disposal procedures  50 Isolate and identify micro-organisms  62 Isolate and identify micro-organisms  62 Repert or statistical analysis  71 Prepare biological specimens for examination  84 Prepare acports  87 Prepare sample for laboratory testing, analysis, or microscopy  74 Prepare vaccines, biologicals, or serums  885 Record test results, test procedures, or inspection data  886 Research human or animal disease  77 Use biological research techniques  Use computers to enter, access or retrieve data  30 Use health or sanitation standards  62 Use knowledge of investigation techniques  Use laboratory equipment  63 Use laboratory equipment  64 Use sidentific research methodos  Use microscope  77 Use quantitative research methodology  18 Use sereational database software  19 Use separablest software  19 Use spreadsheet software  19 Use spreadsheet software  19 Use spreadsheet software  19 Use spreadsheet software	Conduct laboratory research or experiments	57
Cuttivate micro-organisms for study, testing, or medical preparations       84         Develop policies, procedures, methods, or standards       21         Direct and coordinate activities of workers or staff       3         Direct implementation of new procedures, policies, or programs       60         Examine biological or other material specimens under microscope       73         Explain complex mathematical information       30         Follow infectious materials procedures       52         Follow microbiology procedures       74         Follow safe waste disposal procedures       50         Isolate and identify micro-organisms       82         Maintain records, reports, or files       5         Perform statistical analysis       71         Prepare biological specimens for examination       84         Prepare ports       8         Repare reports       8         Prepare reports       8         Record test results, test procedures, or inspection data       48         Research human or animal disease       77         Use biological research techniques       68         Use computers to enter, access or retrieve data       3         Use hazardous materials information       35         Use hazardous materials information       35	Conduct standardized qualitative laboratory analyses	62
Develop policies, procedures, methods, or standards    Direct and coordinate activities of workers or staff   3   3	Conduct standardized quantitative laboratory analyses	62
Direct and coordinate activities of workers or staff  Direct implementation of new procedures, policies, or programs  Examine biological or other material specimens under microscope  Explain complex mathematical information  Tollow infectious materials procedures  Follow microbiology procedures  Follow microbiology procedures  Follow safe waste disposal procedures  Follow safe waste disposal procedures  Follow factors, reports, or files  Ferform statistical analysis  Ferform statistical analysis  Frepare biological specimens for examination  Reprepare sample for laboratory testing, analysis, or microscopy  Frepare vaccines, biologicals, or serums  Record test results, test procedures, or inspection data  Research human or animal disease  Try  Use biological research techniques  Gas  Use chemical testing or analysis procedures  Use homical testing or analysis procedures  Use homourters to enter, access or retrieve data  Use hazardous materials information  Use library or online Internet research techniques  Use library or online Internet research techniques  Use mathematical or statistical methods to identify or analyze problems  Use use user internet research methodology  Use spreadsheet software  Use spreadsheet software  Use spreadsheet software  In 8  In	Cultivate micro-organisms for study, testing, or medical preparations	84
Direct implementation of new procedures, policies, or programs   60	Develop policies, procedures, methods, or standards	21
Examine biological or other material specimens under microscope  [Follow infectious materials procedures  Follow infectious materials procedures  Follow microbiology procedures  Follow safe waste disposal procedures  [Follow safe waste disposal procedures  Maintain records, reports, or files  Ferform statistical analysis  Prepare biological specimens for examination  Repeare sample for laboratory testing, analysis, or microscopy  Prepare vaccines, biologicals, or serums  Record test results, test procedures, or inspection data  Research human or animal disease  T7  Use biological testing instruments  Use biological testing instruments  Use chemical testing or analysis procedures  S4  Use computers to enter, access or retrieve data  Use hazardous materials information  S5  Use hazardous materials information  S6  Use laboratory equipment  S6  Use laboratory equipment  S6  Use mathematical or statistical methods to identify or analyze problems  S6  Use microscope  T7  Use use scientific research methodology  Use seientific research methodology  Use spreadsheet software  S7  Use spreadsheet software  S7  Use spreadsheet software  S8  S7  S7  S8  S8  S8  S8  S8  S8  S8	Direct and coordinate activities of workers or staff	3
Explain complex mathematical information 30 Follow infectious materials procedures 52 Follow microbiology procedures 74 Follow safe waste disposal procedures 50 Isolate and identify micro-organisms 82 Isolate and identify micro-organisms 82 Maintain records, reports, or files 55 Perform statistical analysis 77 Prepare biological specimens for examination 84 Prepare reports 88 Prepare sample for laboratory testing, analysis, or microscopy 74 Prepare vaccines, biologicals, or serums 85 Record test results, test procedures, or inspection data 86 Research human or animal disease 77 Use biological research techniques 68 Use biological testing instruments 73 Use chemical testing or analysis procedures 54 Use computers to enter, access or retrieve data 33 Use hazardous materials information 355 Use laboratory equipment 60 Use library or online Internet research techniques 61 Use mathematical or statistical methods to identify or analyze problems 75 Use unantitative research methodology 75 Use scientific research methodology 75 Use serealsheet software 76 Use sepreadsheet software 78	Direct implementation of new procedures, policies, or programs	60
Follow infectious materials procedures  Follow microbiology procedures  Follow safe waste disposal procedures  Solisolate and identify micro-organisms  Maintain records, reports, or files  Ferform statistical analysis  Perform statistical analysis  Frepare biological specimens for examination  Repare reports  Prepare sample for laboratory testing, analysis, or microscopy  Frepare vaccines, biologicals, or serums  Record test results, test procedures, or inspection data  Research human or animal disease  Use biological research techniques  Gas omputers to enter, access or retrieve data  Use hazardous materials information  Use laboratory equipment  Gas only analysis procedures  Use laboratory equipment  Gas only analysis or serums  Solis or serums	Examine biological or other material specimens under microscope	73
Follow microbiology procedures 74 Follow safe waste disposal procedures 50 Isolate and identify micro-organisms 82 Maintain records, reports, or files 5 Perform statistical analysis 71 Prepare biological specimens for examination 84 Prepare reports 88 Prepare sample for laboratory testing, analysis, or microscopy 74 Prepare vaccines, biologicals, or serums 85 Record test results, test procedures, or inspection data 88 Research human or animal disease 77 Use biological research techniques 68 Use computers to enter, access or retrieve data 93 Use chemical testing or analysis procedures 94 Use computers to enter, access or retrieve data 93 Use hazardous materials information 935 Use halth or sanitation standards 60 Use libbrary or online Internet research techniques 91 Use mathematical or statistical methods to identify or analyze problems 93 Use microscope 74 Use guantitative research methodology 94 Use spreadsheet software 98 Use scientific research methodology 94 Use spreadsheet software 98 Use	Explain complex mathematical information	30
Follow safe waste disposal procedures   50	Follow infectious materials procedures	52
Isolate and identify micro-organisms  Maintain records, reports, or files  Perform statistical analysis  Prepare biological specimens for examination  Repare reports  Repare sample for laboratory testing, analysis, or microscopy  Prepare vaccines, biologicals, or serums  Record test results, test procedures, or inspection data  Research human or animal disease  To Use biological research techniques  Use computers to enter, access or retrieve data  Use hazardous materials information  Use health or sanitation standards  Use laboratory equipment  Use library or online Internet research techniques  Use mathematical or statistical methods to identify or analyze problems  Use quantitative research methodology  Use spreadsheet software  Use scientific research methodology  Use spreadsheet software  18	Follow microbiology procedures	74
Maintain records, reports, or files       5         Perform statistical analysis       71         Prepare biological specimens for examination       84         Prepare reports       8         Prepare sample for laboratory testing, analysis, or microscopy       74         Prepare vaccines, biologicals, or serums       85         Record test results, test procedures, or inspection data       48         Research human or animal disease       77         Use biological research techniques       68         Use biological testing instruments       73         Use chemical testing or analysis procedures       54         Use computers to enter, access or retrieve data       3         Use health or sanitation standards       62         Use knowledge of investigation techniques       16         Use laboratory equipment       60         Use library or online Internet research techniques       21         Use mathematical or statistical methods to identify or analyze problems       30         Use microscope       71         Use quantitative research methods       35         Use relational database software       26         Use scientific research methodology       21         Use spreadsheet software       18	Follow safe waste disposal procedures	50
Maintain records, reports, or files       5         Perform statistical analysis       71         Prepare biological specimens for examination       84         Prepare reports       8         Prepare sample for laboratory testing, analysis, or microscopy       74         Prepare vaccines, biologicals, or serums       85         Record test results, test procedures, or inspection data       48         Research human or animal disease       77         Use biological research techniques       68         Use biological testing instruments       73         Use chemical testing or analysis procedures       54         Use computers to enter, access or retrieve data       3         Use health or sanitation standards       62         Use knowledge of investigation techniques       16         Use laboratory equipment       60         Use library or online Internet research techniques       21         Use mathematical or statistical methods to identify or analyze problems       30         Use microscope       71         Use quantitative research methods       35         Use relational database software       26         Use scientific research methodology       21         Use spreadsheet software       18		
Perform statistical analysis 71 Prepare biological specimens for examination 84 Prepare reports 8 Prepare reports 8 Prepare sample for laboratory testing, analysis, or microscopy 74 Prepare vaccines, biologicals, or serums 85 Record test results, test procedures, or inspection data 48 Research human or animal disease 77 Use biological research techniques 68 Use biological research techniques 73 Use chemical testing or analysis procedures 73 Use computers to enter, access or retrieve data 73 Use hazardous materials information 73 Use health or sanitation standards 73 Use knowledge of investigation techniques 74 Use laboratory equipment 75 Use laboratory equipment 75 Use mathematical or statistical methods to identify or analyze problems 75 Use quantitative research methods 75 Use relational database software 75 Use spreadsheet software 71	· · · · ·	
Prepare reports       8         Prepare sample for laboratory testing, analysis, or microscopy       74         Prepare vaccines, biologicals, or serums       85         Record test results, test procedures, or inspection data       48         Research human or animal disease       77         Use biological research techniques       68         Use biological testing instruments       73         Use chemical testing or analysis procedures       54         Use computers to enter, access or retrieve data       3         Use hazardous materials information       35         Use health or sanitation standards       62         Use knowledge of investigation techniques       16         Use library or online Internet research techniques       21         Use mathematical or statistical methods to identify or analyze problems       30         Use microscope       71         Use quantitative research methods       35         Use relational database software       26         Use scientific research methodology       21         Use spreadsheet software       18	·	
Prepare reports       8         Prepare sample for laboratory testing, analysis, or microscopy       74         Prepare vaccines, biologicals, or serums       85         Record test results, test procedures, or inspection data       48         Research human or animal disease       77         Use biological research techniques       68         Use biological testing instruments       73         Use chemical testing or analysis procedures       54         Use computers to enter, access or retrieve data       3         Use hazardous materials information       35         Use health or sanitation standards       62         Use knowledge of investigation techniques       16         Use library or online Internet research techniques       21         Use mathematical or statistical methods to identify or analyze problems       30         Use microscope       71         Use quantitative research methods       35         Use relational database software       26         Use scientific research methodology       21         Use spreadsheet software       18	Prepare biological specimens for examination	84
Prepare sample for laboratory testing, analysis, or microscopy       74         Prepare vaccines, biologicals, or serums       85         Record test results, test procedures, or inspection data       48         Research human or animal disease       77         Use biological research techniques       68         Use biological testing instruments       73         Use chemical testing or analysis procedures       54         Use computers to enter, access or retrieve data       3         Use hazardous materials information       35         Use health or sanitation standards       62         Use knowledge of investigation techniques       16         Use laboratory equipment       60         Use library or online Internet research techniques       21         Use mathematical or statistical methods to identify or analyze problems       30         Use microscope       71         Use quantitative research methods       35         Use relational database software       26         Use scientific research methodology       21         Use spreadsheet software       18		
Prepare vaccines, biologicals, or serums         85           Record test results, test procedures, or inspection data         48           Research human or animal disease         77           Use biological research techniques         68           Use biological testing instruments         73           Use chemical testing or analysis procedures         54           Use computers to enter, access or retrieve data         3           Use computers to enter, access or retrieve data         3           Use hazardous materials information         35           Use health or sanitation standards         62           Use knowledge of investigation techniques         16           Use laboratory equipment         60           Use library or online Internet research techniques         21           Use mathematical or statistical methods to identify or analyze problems         30           Use microscope         71           Use quantitative research methods         35           Use relational database software         26           Use spreadsheet software         18		
Record test results, test procedures, or inspection data         48           Research human or animal disease         77           Use biological research techniques         68           Use biological testing instruments         73           Use chemical testing or analysis procedures         54           Use computers to enter, access or retrieve data         3           Use health or sanitation standards         62           Use knowledge of investigation techniques         16           Use laboratory equipment         60           Use mathematical or statistical methods to identify or analyze problems         30           Use microscope         71           Use quantitative research methods         35           Use relational database software         26           Use spreadsheet software         18		
Research human or animal disease 77 Use biological research techniques 68 Use biological testing instruments 73 Use chemical testing or analysis procedures 54 Use computers to enter, access or retrieve data 3 Use hazardous materials information 35 Use health or sanitation standards 62 Use knowledge of investigation techniques 160 Use laboratory equipment 600 Use library or online Internet research techniques 221 Use mathematical or statistical methods to identify or analyze problems 300 Use microscope 71 Use quantitative research methods 35 Use relational database software 26 Use spreadsheet software 18		48
Use biological testing instruments73Use chemical testing or analysis procedures54Use computers to enter, access or retrieve data3Use hazardous materials information35Use health or sanitation standards62Use knowledge of investigation techniques16Use laboratory equipment60Use library or online Internet research techniques21Use mathematical or statistical methods to identify or analyze problems30Use microscope71Use quantitative research methods35Use relational database software26Use scientific research methodology21Use spreadsheet software18		
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Use computers to enter, access or retrieve data3Use hazardous materials information35Use health or sanitation standards62Use knowledge of investigation techniques16Use laboratory equipment60Use library or online Internet research techniques21Use mathematical or statistical methods to identify or analyze problems30Use microscope71Use quantitative research methods35Use relational database software26Use scientific research methodology21Use spreadsheet software18	Use biological testing instruments	73
Use computers to enter, access or retrieve data3Use hazardous materials information35Use health or sanitation standards62Use knowledge of investigation techniques16Use laboratory equipment60Use library or online Internet research techniques21Use mathematical or statistical methods to identify or analyze problems30Use microscope71Use quantitative research methods35Use relational database software26Use scientific research methodology21Use spreadsheet software18	Use chemical testing or analysis procedures	54
Use health or sanitation standards62Use knowledge of investigation techniques16Use laboratory equipment60Use library or online Internet research techniques21Use mathematical or statistical methods to identify or analyze problems30Use microscope71Use quantitative research methods35Use relational database software26Use scientific research methodology21Use spreadsheet software18	Use computers to enter, access or retrieve data	
Use knowledge of investigation techniques16Use laboratory equipment60Use library or online Internet research techniques21Use mathematical or statistical methods to identify or analyze problems30Use microscope71Use quantitative research methods35Use relational database software26Use scientific research methodology21Use spreadsheet software18	Use hazardous materials information	35
Use laboratory equipment       60         Use library or online Internet research techniques       21         Use mathematical or statistical methods to identify or analyze problems       30         Use microscope       71         Use quantitative research methods       35         Use relational database software       26         Use scientific research methodology       21         Use spreadsheet software       18	Use health or sanitation standards	62
Use library or online Internet research techniques       21         Use mathematical or statistical methods to identify or analyze problems       30         Use microscope       71         Use quantitative research methods       35         Use relational database software       26         Use scientific research methodology       21         Use spreadsheet software       18	Use knowledge of investigation techniques	16
Use mathematical or statistical methods to identify or analyze problems       30         Use microscope       71         Use quantitative research methods       35         Use relational database software       26         Use scientific research methodology       21         Use spreadsheet software       18	Use laboratory equipment	60
Use microscope71Use quantitative research methods35Use relational database software26Use scientific research methodology21Use spreadsheet software18	Use library or online Internet research techniques	21
Use quantitative research methods35Use relational database software26Use scientific research methodology21Use spreadsheet software18	Use mathematical or statistical methods to identify or analyze problems	30
Use relational database software     26       Use scientific research methodology     21       Use spreadsheet software     18	Use microscope	71
Use relational database software     26       Use scientific research methodology     21       Use spreadsheet software     18	Use quantitative research methods	35
Use scientific research methodology     21       Use spreadsheet software     18		
Use spreadsheet software	Use scientific research methodology	
	•	
Tose word processing or desktop publishing software [1] [7]	Use word processing or desktop publishing software	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

# **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 86

Focus Occupation: Medical and Clinical Laboratory Technologists (29-2011) Associated Occupation: Microbiologists (19-1022)

Tools and Technologies	Exclusivity
Autoclave and sterilizer equipment and accessories	12
Cameras	2
Chemical evaluation instruments and supplies	10
Chromatographic measuring instruments and accessories	16
Clinical and diagnostic analyzers and accessories and supplies	18
Computer printers	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Fermentation equipment	31
General laboratory glassware and plasticware and supplies	13
Histology equipment	35
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Laboratory baths	24
Laboratory centrifuges and accessories	13
Laboratory cooling equipment	25
Laboratory decanting and distilling and evaporating and extracting equipment and supplies	19
Laboratory electrophoresis and blotting system and supplies	26
Laboratory enclosures and accessories	17
Laboratory filtering equipment and supplies	51
Laboratory heating and drying equipment	13
Laboratory incubating equipment	20
Laboratory microscope slides and supplies	20
Laboratory mixing and stirring and shaking equipment and supplies	19
Laboratory ovens and accessories	15
Laboratory pumps and tubing	23
Laboratory slide stainer equipment and accessories	80
Laboratory stands and racks and trays	90
Laboratory washing and cleaning equipment	35
Lamps	19
Light and wave generating and measuring equipment	4
Microorganism propagation and transformation media and kits and equipment	47
Pipettes and liquid handling equipment and supplies	16
Safety apparel	4
Specimen collection and transport containers and supplies	14
Spectroscopic equipment	10
Temperature and heat measuring instruments	6

Test Tubes	26
Tissue culture and high throughput screening supplies	31
Viewing and observing instruments and accessories	4
Weight measuring instruments	7

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of  $O^*NET$  (Occupation Information Network) data.